

Training of Anticipatory Postural Adjustments in an 83-Year-Old Female with Severe Anxiety Post-Femoral Fracture: A Case Report  
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BACKGROUND PURPOSE:

Femoral fractures as a result of a sudden fall is a common event among older patients and fear of falling related to these events is a usual side effect.

*The purpose of this case report is to present the outcomes of using APA training exercises in conjunction with conventional physical therapy to improve gait independence, and movement anxiety in older adult patients post femoral fracture secondary to a fall.*

Case DESCRIPTION:

BODY STRUCTURE

Decreased:

- Static and dynamic balance
- Lower extremity strength

ACTIVITY LIMITATIONS

Decreased:

- Independence with ambulation

Increased:

- Frequency of falls
- Use of an assistive device for ambulation
- Use of upper extremities during ambulation and sit to stand
- Increased fear of falling

PARTICIPATION

Wants to participate in:

- Ambulating within her home without the use of a walker

ENVIRONMENTAL FACTORS

- Married
- Retired Translator
- Regularly attends events within the community

PERSONAL FACTORS

- 83 years old
- Female
- Post Femoral Fracture
- Diagnosed Anxiety disorder

METHODS:

Exercise Parameters Weeks 6-11	Week 6-8	Week 9-11
Seated Weighted Ball Kicks (Image 1)	1 minute with contact guard assist progressing to supervision	2 minutes with supervision progressing with increased speed of ball throws.
Seated Weighted Ball Drops (Image 2)	2 minutes, 1 and 2 pound balls with supervision	2 minutes, 1, 2 and 3 pound balls with supervision progressing to standing with contact guard assist
Weight Shifts in Tandem Standing	1 minute, chest level countertop, contact guard assist from therapist. (starting in the eight week)	1 minute progressing to 2 minutes, chest level countertop, one arm on the wall one on the counter, contact guard assist from therapist progressing to supervision
Seated Weight Shifts (Image 3)	1 minute progressing to 2 minutes, contact guard assist progressing to supervision from therapist, just the weight shift and no degree of standing	2 minutes, supervision from therapist, weight shifting with patient's tailbone fully coming off of the seat progressing to shifting forward until only the back of the patient's legs were in contact with the chair
Stepping	10 progressing to 20 alternating steps with supervision of a second therapist standing behind her	20 alternating steps with both hands on the therapist's shoulders progressing from supervision of a second therapist
Seated Arm Swings (Image 4)	None	1 minute, seated on a firm surface with unweighted arms progressing to 1 pound weights in each hand

RESULTS:

Upon completion of 16 visits over 11 weeks, patient reported:

- increased independence at home,
- better sleeping patterns
- decreased anxiety while using her rolling walker

	Initial	Post
MMT R LE hip flexion	3+/5	4+/5
MMT R LE knee flexion	3+/5	4+/5
MMT R knee extension	4+/5	4+/5
MMT R Dorsi Flexion	4+/5	4+/5
MMT L hip flexion	4+/5	4+/5
MMT L knee flexion	4+/5	4+/5
MMT L knee extension	4+/5	4+/5
MMT L Dorsi Flexion	5/5	5/5

	Initial	Post
Berg Balance Scale	8/56	22/56 (MCID reached )

CLINICAL RELEVANCE:

Balance training is an important component to physical therapy that helps to improve patient's functional capacity and independence. APAs (Anticipatory Postural Adjustments) can be defined as “the activation of muscles before the actual perturbation of balance”.<sup>5</sup> While there is minimal research in regards to physical therapy utilizing APA training for elderly fallers post femoral fracture, this case report exhibits the positive impact physical therapy can offer to an individuals function post femoral fracture with Fear of Falling.

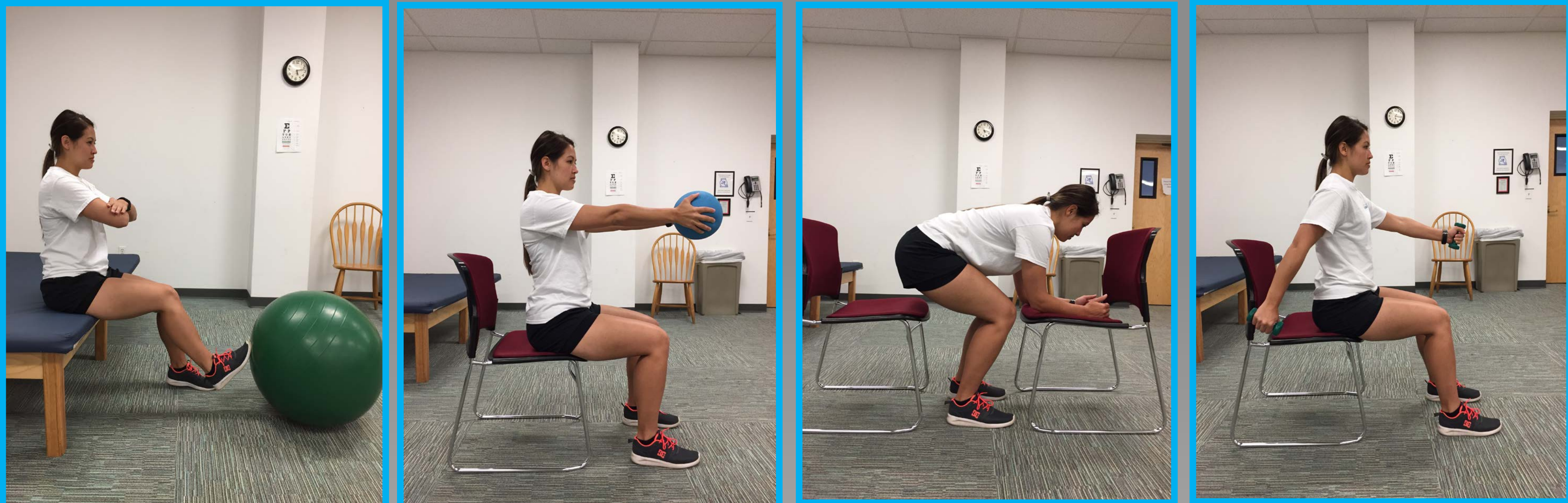


Image 1

Image 2

Image 3

Image 4

